

## XLIX.—On new Species of Alcides from the Oriental Region. By GUY A. K. MARSHALL, C.M.G., D.Sc.

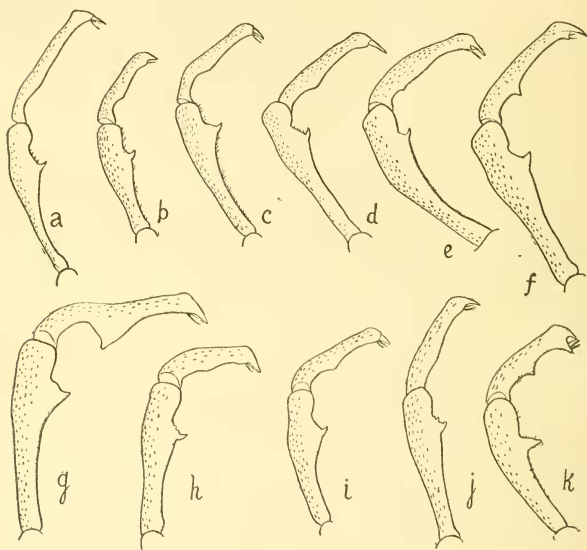
[Plate VII.]

*Alcides crinalifer*, sp. n. (Pl. VII. fig. 1.)

♂ ♀. Integument black, clothed above (between the shiny granules) with small, narrow, non-contiguous, fawn-coloured scales that are somewhat fimbriate at the apex, and with the following creamy-white markings, that are formed of dense, overlapping, broad, plumose scales: a median stripe on the base of the rostrum and covering the whole forehead; three stripes on the pronotum, the median being a little narrower than the laterals; the elytra with a broad stripe continuous with the lateral one on the prothorax, commencing on intervals 5 and 6 at the base, but soon passing on to intervals 6, 7, and half of 8, and so continuing to the apex; a stripe starting just behind the scutellum, running for a short distance along interval 1, and turning obliquely outwards to join the lateral stripe before the middle; and, finally, a stripe starting on the suture behind the middle, running obliquely to interval 3, and continuing straight along that interval to the apex; the lower surface with dense, fawn-coloured, plumose scales, which are more sparse in the middle of the metasternum and venter, the last ventrite being mainly bare.

*Head* with close shallow punctuation on the vertex, the forehead with a broad, shallow, punctate depression, which is filled up with scaling. *Rostrum* shorter than the front femur in both sexes, feebly curved, slightly dilated at the apex, coarsely punctate as far as the antennæ (slightly less so in ♀ than in ♂), and with a shallow, median, longitudinal impression in the basal half, filled with scaling. *Prothorax* transverse, broadest at the base, and narrowing rather rapidly at the apex, with the sides gently rounded and shallowly constricted at the apex; the postocular lobes well developed; the dorsum with fairly large, separated, low, shining granules, except on the three pale stripes, the lower lateral margin of the granulate area sharply defined. *Scutellum* not enclosed, transverse, bare, either flattened, shallowly impressed, or with a very deep impression. *Elytra* very elongate-ovate, broader than the prothorax at the shoulders, which are very sloping, and thence gradually narrowed to the apices, which are slightly deliscent; the basal lobes

much less prominent than usual, the basal margin being almost transverse from interval 4 to the shoulder; the dorsal outline convex, forming a regular curve with its highest point at the middle, the posterior declivity having an average slope of  $45^{\circ}$ ; the shallow striae containing small, deep, separated punctures, each containing a minute horizontal seta, where not obliterated by the dense scaling; intervals 1-9



Front femur and tibia of: (a) *Alcides crinalifer*, sp. n.; (b) *A. habenatus*, sp. n.; (c) *A. loratus*, sp. n.; (d) *A. pyrifer*, sp. n.; (e) *A. jugalis*, sp. n.; (f) *A. stevensi*, sp. n.; (g) *A. subsellatus*, sp. n.; (h) *A. arcicollis*, sp. n.; (i) *A. bryanti*, sp. n.; (j) *A. trigonophorus*, sp. n.; (k) *A. vitalisi*, sp. n.

slightly convex, and each with a rather irregular and often duplicated row of closely-set, low, shining granules, except along the stripes of dense white scaling; interval 10 with only a few granules on a line with the metasternum, and again at the apex. *Legs* red-brown, with the apices of the femora and the tarsi blackish, and set with sparse narrow scales; all the femora with a sharp tooth and a row of

four small teeth in front of it (fig. 1, *a*); the tibiæ simple internally.

*Length* 8.5–10 mm., *breadth* 3.5–4 mm.

MADRAS: Oucherlony Valley, 4500 ft., Nilgiri Hills (*H. L. Andrewes*); Ootacamund.

Described from four specimens.

Most nearly allied structurally to *A. acutus*, Fst., but with markings suggestive of the group represented by *A. tenuatus*, Illr., and *A. vinculosus*, Illr.; the pattern is, however, quite distinctive, especially the broad continuous stripe on intervals 6 and 7 and the hairpin-like marking on the declivity.

*Alcides habenatus*, sp. n. (Pl. VII. fig. 2.)

♂ ♀. Form elliptical: integument black, with stripes and bands formed of dense, creamy-white, plumose scales; the prothorax with a narrow median stripe and a broader bilateral stripe, ending on the base opposite intervals 5 and 6 of the elytra, and below this an ill-defined broad stripe on the pleuræ; the elytra thinly clothed with short brown setæ and with the following pale markings: a broad curved intrahumeral stripe, starting at the base on intervals 5 and 6, turning outwards just behind the shoulder on to intervals 7–10 and ceasing a little before the middle, its inner edge forming a regular curve or with a more or less distinct re-entrant angle; a broad oblique band (of varying width) starting at the middle of interval 2 and sloping backwards to join the proximal end of a broad lateral stripe that occupies more than the apical third of intervals 7–9; and, finally, a stripe on the apical fourth of interval 3; the lower surface fairly densely covered with buff plumose scales.

*Head* with close shallow punctation and without a frontal fovea. *Rostrum* moderately stout, as long as the front femur in ♀, shorter in ♂, a little narrower in the basal than in the apical half, and with the antennæ inserted far beyond the middle in both sexes; the dorsal outline shallow sinuate in the basal half, the punctation fairly strong and close in ♂, and but little finer in ♀. *Prothorax* a little broader than long, subconical, widest at the base, regularly narrowing in front, with the sides gently rounded and the subapical constriction shallow; the apical margin subtruncate dorsally; the longitudinal outline flat behind and gently sloping in front; the dorsum closely set throughout with low rounded granules, which are very much reduced on the apical area. *Scutellum* punctiform, bare. *Elytra* elongate-ovate, distinctly

broader at the shoulders than the prothorax, the basal lobes not very strongly produced, the apices jointly rounded; the striae with comparatively small shallow punctures and not deeper or noticeably curved at the base; the intervals with irregular low granules, which are more numerous on the basal half and absent from the squamose areas, the darker areas with numerous short, recumbent, pale setae; a very shallow curved impression just behind the scutellum. *Legs* comparatively short, shallowly punctate, and rather thinly covered with linear scales; the femora with a short simple tooth almost hidden by setae; the tibiae almost straight on the outer edge, the front pair not toothed on the inner edge and only faintly bisinuate (fig. 1, *b*).

*Length* 6.5–8 mm., *breadth* 3–3.5 mm.

MADRAS: Kodaikanal (*T. V. Campbell*, type); Palni Hills, 6000 ft. (*P. B. Nathan*).

Described from ten specimens.

Closely resembles *A. audax*, Heller, in general facies, but in that species the humeral stripe on the elytra is replaced by a subhumeral spot, the oblique posterior stripes meet on the suture in front of the middle and do not extend along the lateral margin to the apex, and the non-squamose areas of the elytra bear only sparse inconspicuous dark setae.

*Alcides trigonophorus*, sp. n. (Pl. VII. fig. 10.)

♂ ♀. Form subelliptical; integument black, thinly clothed with short, recumbent, brown setae and marked with narrow pale lines formed of whitish scales that are narrowly bifid or trifid to the base; the prothorax with five sharply defined pale stripes, the upper lateral one terminating at the base opposite the shoulder of the elytron, the lower lying below the level of the lateral margin of the elytron; the elytra with a subtriangular marking formed by a narrow oblique line on each, running from the base of stria 1 to behind the middle on interval 9, and there connected together by a post-median curved line of the same width; a pale line on interval 9 from the base to one-third the length and another at the apex of interval 3; the lower surface clothed with numerous brown plumose scales.

*Head* with shallow confluent punctation and narrow split scales, the forehead transversely impressed. *Rostrum* long and slender, slightly widened at the insertion of the antennae (beyond the middle in both sexes) and again at the apex, rather strongly punctate throughout (except at the extreme apex in the ♀), but the punctures on the posterior part

closer and longitudinally confluent, there being a low median carina which sometimes extends beyond the antennæ; the punctures in the ♂ markedly coarser than in the ♀. *Antennæ* slender, the scape nearly as long as the funicle and club together; the funicle with joint 2 as long as but more slender than 1, 3 longer than 4, 4 to 6 equal in length and longer than broad, 7 more separated from the club than usual and only as long as its basal joint. *Prothorax* rather transverse, subconical, broadest at the base and rapidly narrowing in front, the sides feebly rounded and with a distinct subapical constriction; the dorsal apical margin truncate, the post-ocular lobes feeble, and the dorsal outline only slightly convex; the dorsum with shallow rugulose punctures, many of the interspaces forming irregular granule-like elevations, which are coriaceous and opaque. *Scutellum* very small, punctiform, not enclosed in front. *Elytra* oblong-ovate, a little broader at the shoulders than the prothorax, obtusely rounded at the apex, and with a shallow transverse impression near the base; the striæ deeper at the base and apex, elsewhere containing large oblong punctures; the intervals rather broader than the striæ, very finely and transversely rugulose. *Legs* (fig. 1, *j*) moderately long and slender, rugosely punctate, clothed with short brown setæ and narrow split scales; the femora less clavate than usual, with a long sharp tooth, followed by two or three denticulations; the front tibiæ feebly curved externally and shallowly bisinuate within, the posterior pair simple. *Sternum* with the front intercoxal space only one-third as wide as the median one; the metasternum coriaceous, feebly and transversely granulose.

*Length* 8.5–9.5 mm., *breadth* 3.25–3.75 mm.

INDIA: Manipur, Assam (*Doherty*).

Described from six specimens.

In general form, structure, and size very similar to *A. scenicus*, Fst., but readily distinguished from this and all its other allies by the very distinctive pattern, which strikingly resembles that of a structurally very different species, *A. ligatus*, Pasc.

*Alcides loratus*, sp. n. (Pl. VII. fig. 3.)

♂ ♀. Form subcylindrical; integument black, with stripes and bands composed of pale, narrow, plumose scales dusted with pale yellow powdering; the forehead and base of the rostrum with thin powdering; the pronotum with a narrow median stripe from the base to beyond the middle, and a

broad bilateral stripe extending obliquely from the front margin to the basal angle below the shoulder of the elytra; the elytra with a slightly oblique dorsal stripe from the base to about one-third the length, starting at the base on intervals 2 and 3 and ending on intervals 3-5; behind the middle a complete broad transverse band gradually widening outwardly and curving forwards at the sides, being usually continued as a narrow stripe along interval 8 to the base; and, finally, a broad V-shaped mark at the apex on intervals 3 and 7-9, not uniting with the transverse band; the lower surface with dense pale scaling and yellow dusting throughout.

*Head* coriaceous on the vertex, the forehead sparsely punctate and with a shallow median fovea. *Rostrum* only a little longer in ♀ than in ♂, strongly deflexed, slightly curved distally, cylindrical as far as the antennæ and very little wider beyond; in the ♂ closely and fairly strongly punctured throughout, with a short smooth median line between the antennæ, and the submentum with a downwardly projecting tooth; in the ♀ the punctures rather smaller and separated. *Antennæ* inserted well beyond the middle in both sexes, the scape longer than the funicle; joint 2 of the funicle as long as but much more slender than 1, 3 to 5 equal and as long as or a little longer than broad, 6 wider and longer than broad, 7 as long as the first two joints of the club. *Prothorax* widest at the base, subconical, the sides gently rounded and distinctly constricted near the apex; the anterior dorsal margin feebly rounded, the postocular lobes distinct and heavily fringed; the dorsal outline sloping gently near the apex and plane behind; the dorsum closely set with somewhat depressed, forwardly directed, and pointed granules, each bearing a recumbent seta, but the apical area only with sparse shallow punctures. *Scutellum* not enclosed, subcircular or slightly transverse, bare, smooth, plane or with a more or less distinct median depression. *Elytra* subcylindrical, a trifle broader than the base of the prothorax, the basal lobes not very strongly produced, and the apices separately rounded; the striæ containing large deep punctures as far as the postmedian band, beyond which the punctures disappear, striæ 4 and 5 being deeper at the base and curved outwards; the intervals even, rugulose, and sometimes indistinctly granulate, the non-squamose parts fairly densely clothed with short curved setæ and thinly covered with yellow or reddish powdering; a broad deep impression behind the scutellum, the pre-apical impression shallow. *Legs* (fig. 1, c) rather elongate, rugulose; the

femora rather densely clothed with plumose scales and bearing a broad simple tooth, except the middle pair, which has a minute additional tooth; the tibiæ setose, the outer edge strongly curved near the base in the anterior pairs, the front pair carinate on the inner edge and with a deep basal sinuation. *Sternum* with the space between the coxæ practically the same in all three pairs; the metasternum finely rugulose, not granulate.

Length 7.75–8.5 mm., breadth 2.5–3 mm.

MADRAS: Palni Hills, 6000 ft., v. 1917 (*P. B. Nathan*, type); Kodaikanal (*T. V. Campbell*); Munaar, Travancore.

Described from seven specimens.

Like an enlarged *A. vafellus*, Fst., which it resembles almost exactly in pattern, except that in that species the transverse band on the elytra, when viewed laterally, slopes more obliquely forwards; further, the punctuation of the elytra is much coarser, the prothorax is much less abruptly constricted in front, and the front tibiæ are only shallowly sinuate at the base in *A. vafellus*.

*Alcides pyrifer*, sp. n. (Pl. VII. fig. 4.)

♂. Form suboblong; integument piceous black, with pale markings formed of very small, fringed, overlapping, creamy-white scales; on the pronotum and elytra is a large pear-shaped area of the ground-colour surrounded by a line of white scaling, which starts on the front margin of the pronotum, continues on to the base of interval 5 of the elytra, almost immediately passes to 6, then at one-third the length to 7, continues on this to beyond the middle, and then curves transversely inwards to the suture, being there narrowly separated from the corresponding line on the other side; a little behind the middle on interval 8 a short line of scaling contiguous with the stripe and a similar, rather longer one on interval 9; a V-shaped white marking at the apex of intervals 3 and 9; the pronotum with a faint, narrow, median, pale line in the basal third and a sharply defined lateral stripe on a line with interval 10 of the elytra; the lower surface with fairly dense, buff, fringed scales, the metanotum with a large lateral patch of much denser silvery-white scaling.

Head with rather coarse confluent punctuation, leaving two small, transverse, smooth patches on a line with the upper edge of the eye; the forehead with a faint transverse impression at its junction with the rostrum and with an inconspicuous median fovea. *Rostrum* elongate, gently

curved, cylindrical to the insertion of the antennæ, and thence slightly dilated to the apex; very coarsely and closely punctate almost to the extreme apex, each puncture containing a scale that is fringed at the apex. *Antennæ* with the scape only as long as the first six joints of the funicle, of which joint 1 is a little shorter than 2+3, 3 to 6 are transverse, and 7 is very long, as long as the  $2\frac{1}{2}$  preceding joints and more than twice as long as the club, which is much contracted. *Prothorax* much broader than long, subparallel-sided from the base to the middle, thence strongly and roundly narrowed, with a well-marked subapical constriction; the dorsal apical margin rounded, the longitudinal outline gently convex and sloping upwards anteriorly in relation to the long axis of the body; the dorsum evenly set with well-separated, flat, shining granules, the apical area closely punctate. *Scutellum* not enclosed, transverse, bare, and shallowly punctate. *Elytra* cylindrical, distinctly wider at the shoulders than the prothorax, broadly rounded behind, and with a curved transverse impression behind the scutellum; the shallow striæ with large quadrate punctures (each containing a minute granule on either side) as far as the transverse band, behind which the striæ are deeper and the punctures much reduced, the striæ not being noticeably deepened at the base; the intervals about as broad as the striæ, smooth or finely aciculate, with fairly numerous minute granules on the apical area and at the extreme base, there being also single granules on the anterior slope of each puncture. *Legs* (fig. 1, *d*) moderately long and slender, coarsely punctate, with a scale in each puncture; the femora with a very sharp curved tooth and a feebly denticulate ridge in front of it; the front tibiæ only gently curved externally, strongly bisinuate internally, and with an obtuse tooth behind the middle, the posterior pairs simple and scarcely bisinuate internally. *Sternum* with the front intercoxal space narrower than the median one; the sculpturing of the metasternum concealed by the scaling.

*Length* 9–10 mm., *breadth* 3·5–4 mm.

SARAWAK: Mt. Matang, ii. 1914, Quop, iii. 1914, Retub, v. 1914 (*G. E. Bryant*).

Described from five specimens.

*Alcides pyrifer hemicyclus*, subsp. n.

♂. Differs from the typical form in the following characters: The elytral stripe broadly interrupted on each side behind the shoulder, the marking behind being therefore



shaped like a horse-shoe; moreover, the contiguous stripes on intervals 8 and 9, instead of being much shorter than that on 7, are nearly or quite as long; and there is no trace of the median stripe on the pronotum. The sides of the prothorax are not parallel in the basal half, but distinctly convergent in front.

*Length* 9.5–10.5 mm., *breadth* 3.75–4 mm.

S.E. BORNEO: Pengaron (*Doherty*).

Described from four specimens.

*Alcides jugalis*, sp. n. (Pl. VII. fig. 5.)

♂ ♀. Form subcylindrical; integument black, with pale markings formed of small, short, whitish, plumose scales dusted with ochreous powdering; the pronotum with three stripes, the median one much narrower than the laterals, and all reaching the apex; the elytra with a broad sutural stripe on intervals 1 and 2 from the base almost to the middle; a narrow, shorter, and rather oblique stripe starting at the base on interval 6 and ending on interval 4; a broad, complete, common, transverse band behind the middle, which widens and curves forwards at the sides, being continued to the base as a narrow stripe along interval 10; and a subtriangular apical patch covering all the declivity except interval 11; the lower surface fairly densely covered with plumose scales and ochreous powdering, which are thinner down the middle of the metasternum and abdomen.

*Head* unusually broad, longitudinally rugulose, and without any median fovea. *Rostrum* stout, subcylindrical, almost straight, slightly narrowing from the base to the middle, and feebly widening again at the apex, of about equal length in the two sexes, coarsely punctate and longitudinally striolate at the base, and with a broad deep furrow on each side between the eye and antenna; the punctures strong and close throughout in the ♂, almost as strong on the basal half in the ♀, but much finer apically. *Antennæ* inserted beyond the middle in both sexes, the scape a little shorter than the funicle, of which joint 1 is longer than 2 and 3, 3 to 6 are bead-like and transverse, and 7 is much shorter than the club. *Prothorax* a little shorter than its basal width, subconical, gradually narrowed from base to apex, with the sides only slightly rounded and the subapical constriction feeble; the dorsal apical margin rounded, the longitudinal outline almost flat, but the whole prothorax tilted upwards in front; the dorsum set throughout with small separated granules, those on the discal area each

bearing an opaque patch, the remainder shiny, and the apical area coriaceous dorsally and rugosely punctate at the sides. *Scutellum* small, ovate, bare, and entirely enclosed in front. *Elytra* subcylindrical, hardly broader than the prothorax at the shoulders, very slightly widening behind and broadest not far from the apex, which is very broadly rounded, and with a shallow transverse impression close to the base; the broad deep striæ containing large quadrate foveæ, and becoming much shallower on the declivity; the intervals much narrower than the striæ, subcostate, shiny, rugulose, and the dorsal ones subgranulate towards the base; the setæ on the non-squamose area extremely minute. *Legs* (fig. 1, *e*) moderately long, rugosely punctate, and thinly clothed with linear scales; the femora with a small, sharp, simple tooth; the front tibiæ much compressed, very broad in the basal half, and rapidly narrowing towards the apex, the outer edge gently and evenly curved, the inner edge almost straight and with a very small sharp tooth not far from the base, and the posterior pairs simple; the front coxæ of the ♂ with a laminate tubercle. *Sternum* with the front coxæ almost as widely separated as the middle pair; the metasternum smooth and with a few sparse granules.

*Length* 12–13 mm., *breadth* 4.5–4.75 mm.

MALAY PENINSULA: Kinta Valley, S. Perak (*H. N. Ridley*, type); Ligor (*Castelnau*).

Described from a pair.

Allied to *A. sellatus*, Fst., but that species is much smaller and has a very deep depression at the base of the elytra; the stripe on the basal third of intervals 5 and 6 is united externally with the lateral stripe; the front tibiæ are armed with a strong sharp tooth at the middle of the internal edge, etc.

*Alcides subsellatus*, sp. n. (Pl. VII. fig. 7.)

♂ ♀. Form subcylindrical; integument black, with sharply defined creamy-white stripes and bands; the head and the rostrum (in ♂ only) with thin pale scaling; the pronotum with three pale stripes which do not quite reach the apex; the elytra each with an oblique stripe starting at the base just in front of the scutellum and ending at the middle on stria 4, and another lateral stripe starting at the base on intervals 6 and 7 (and including the extreme base of 5) for one-fourth the length, then passing for a short distance to intervals 7 and 8, then widening to cover intervals 6–9, and, finally, merging into a broad, well-defined, transverse band

that extends right across the elytra; the dark dorsal areas densely clothed with curled black scales, except at the apex where there are sparse, pale buff, setiform scales; the basal third of the lateral area, including the shoulders, quite bare and shiny; the lower surface fairly closely covered with pale buff plumose scales, except on the sides of the metasternum, which are very densely clothed with a silky patch of silvery-white hairs.

*Head* with confluent punctation and a shallow median fovea; a short median carina about the fovea in the ♂ only. *Rostrum* very long, longer than the head and prothorax, of equal length in the two sexes, and gently curved; in the ♂ the dorsum markedly flattened from the base to the antennæ, with a sharp median carina terminating at an inter-antennal fovea, an undulating lateral carina at the edge of the flattened area, and a less distinct one just within, the apical area convex and closely punctate, and the submentum with a downwardly projecting tooth; in the ♀ not flattened above, with confluent punctation in the basal half, a broad, low, smooth, median carina and a very narrow lateral one on each side, the apical area sparsely punctate and shiny.

*Antennæ* inserted at the middle of the rostrum in the ♀ and a little beyond it in the ♂; the scape as long as the funicle; joint 1 of the funicle as long as 2+3, 4 to 6 bead-like and slightly transverse, 7 as long as the two basal joints of the club. *Prothorax* broader than long, parallel-sided from the base to the middle, then rapidly narrowing to the apex and with a shallow subapical constriction; the apical margin truncate dorsally, the dorsal outline slightly convex, the whole prothorax being tilted upwards anteriorly in relation to the long axis of the body; the dorsum throughout with separated and much flattened granules, except the apical area, which is closely and shallowly punctate. *Scutellum* small, not enclosed in front, pyriform, broadest behind, bare and usually with a shallow median impression. *Elytra* cylindrical, not broader than the thorax, with a broad, shallow, transverse impression at the base, and broadly rounded behind; the striæ shallow and with coarse punctures (mainly hidden by the scaling), but becoming much deeper and with much reduced punctures on the declivity; the intervals even, rugosely punctate, 4 and 5 being subgranulate towards the base. *Legs* (fig. 1, *g*) elongate, shallowly punctate, and rather thinly clothed with linear scales; the front femora with a broad triangular tooth, the front edge of which is obscurely denticulate, the teeth on the two posterior pairs progressively smaller; the front tibiæ very

strongly curved at one-third from the base, the outer margin sinuate in the apical half, the inner margin with a very large laminate tooth, the posterior edge of which is broadly flattened, the posterior tibiæ simple; the front coxæ obtusely tuberculate in the ♂. *Sternum* with the space between the front coxæ as broad as that between the middle pair.

*Length* 8.75–11 mm., *breadth* 3.25–4 mm.

SUMATRA: Merang (*W. Doherty*).

Described from six specimens.

Most nearly allied to *A. sellatus*, Fst., a narrower species, which has a common broad sutural stripe on the basal third and the dark area surrounding it is much dilated behind (parallel-sided in *subsellatus*); the prothorax is as long as broad and a little narrower than the elytra; the saddle-like basal depression on the elytra is much deeper; the 7th joint of the funicle is longer than the club, etc.

*Alcides arcicollis*, sp. n. (Pl. VII. fig. 8.)

♂. Form subcylindrical; integument black, with pale markings formed of broad plumose scales covered with yellow powdering; the pronotum with a median stripe which is broad in the basal half and rapidly narrows in front, reaching only the subapical constriction, and the broader lateral stripes more oblique than usual and curving inwards in front so as to unite before reaching the apex, thus forming a regular arch; the elytra with a sutural stripe from the base to the middle, which in its basal half covers the space from the suture to stria 2, but in the apical half the inner edge gradually diverges outwards, leaving interval 1 bare; another rather shorter, narrower, and oblique stripe starting at the base on interval 6 and ending on interval 5; a broad postmedian band, curving forwards (but not widening) at the sides, reaching the lateral margin at about the middle, and continuing to the base as a stripe covering the space between striæ 9 and 10 inclusive, and no apical patch; the lower surface rather densely clothed with plumose scales and yellow powder.

*Head* closely and strongly punctate, with a small frontal fovea and with an impressed line round the upper edge of each eye. *Rostrum* elongate, cylindrical, slightly dilated at the apex, gently curved, and with a downwardly projecting tooth on the submentum; with coarse, longitudinally confluent punctation from the base to the antennæ, which are inserted well beyond the middle, the apical area shiny and

sparsely punctate. *Antennæ* with the scape as long as the whole funicle, which has joint 1 a little shorter than 2+3, 3 to 6 bead-like and transverse, and 7 as long as the two basal joints of the club. *Prothorax* slightly broader than long, parallel-sided from the base to the middle, then roundly narrowed and with the subapical constriction rather shallow; the dorsal anterior margin slightly rounded, the longitudinal outline feebly curved and sloping upwards from the base; the dorsum fairly closely set with markedly flattened granules. *Scutellum* punctiform, glabrous, almost enclosed in front. *Elytra* cylindrical, not broader than the prothorax, broadly rounded behind, and with a shallow transverse impression at the base; the deep striæ containing large oblong foveæ, which are reduced behind the post-median band, so that the striæ appear deeper there, but not deepened at the base; the intervals rather narrower than the striæ, subcostate, rugosely punctate, and with small setiform scales, which are sparse in the basal half and much denser at the apex. *Legs* (fig. 1, *h*) relatively short and stout, thinly clothed with short recumbent setæ; the anterior pairs of femora with an elongate vertical tooth and two indistinct denticulations in front of it, the hind pair with a small simple tooth; the front tibiæ broad, narrowing to the apex, the inner edge not toothed and very feebly bisinuate, the posterior pairs simple; the front coxæ not tuberculate. *Sternum* with the front intercoxal space very nearly as wide as the median one; the metasternum sparsely granulate towards the sides.

*Length* 9.5–10.5 mm., breadth 3.5–3.6 mm.

JAVA: Depok, iv. 1909 (*G. E. Bryant*).

Described from two males.

Very closely allied to *A. jugalis*, sp. n., but the elytra are more parallel-sided, and the prothorax less conical and more abruptly narrowed in front; the lateral stripes on the pronotum unite anteriorly before reaching the front margin; the sutural stripe on the elytra is furcate posteriorly, etc.

*Alcides stevensi*, sp. n. (Pl. VII. fig. 6.)

♂ ♀. Integument black or picuous black, not very densely clothed with small pale scales, and more or less dusted with rust-red powder.

*Head* closely punctate, the forehead with a shallow median fovea. *Rostrum* a little shorter than the front femur in both sexes, nearly straight but strongly deflected, and gradually widened at the apex; strongly and closely punctate throughout in the ♂, and with the punctures in the basal half more

or less confluent longitudinally; in the ♀ a little longer and with the punctation much finer. *Prothorax* rather broader than long, subparallel-sided for a short distance from the base, then roundly narrowed and strongly constricted at the apex; the apical margin narrowly lobate in the middle dorsally, the postocular lobes well marked; the dorsal outline gently convex longitudinally, deepest in the middle; the dorsum with dense, low, rounded granules, each with a short recumbent seta on its anterior edge, the interstices thinly clothed with setiform scales; there is a trace of a shallow median stria, terminating in a deep impression on the basal lobe. *Scutellum* not enclosed, somewhat pyriform, with a few minute scales, and sometimes with a shallow median impression. *Elytra* subcylindrical, distinctly broader than the prothorax, with rounded shoulders and with a shallow, curved, transverse impression just behind the scutellum; the striæ with deep quadrate punctures, each containing a minute horizontal seta, but most of them more or less filled up with scaling or powdering, striæ 3-5 deeper at the base and curving outwards; the intervals broader than the striæ, plane, and closely punctate or finely rugulose, 2-5 more or less granulate towards the base; the scales small, oblong, fringed at the apex and somewhat curved. *Legs* (fig. 1, *f*) dark piceous, sparsely clothed with similar but larger scales; the femora with coarse confluent punctation and armed with a stout simple tooth; the tibiæ reticulately punctate, with a sharp tooth on the inner edge above the middle (reduced to a mere angulation on the hind pair) and another near the apex.

*Length* 12-13 mm., breadth 5.25-5.5 mm.

ASSAM: Silonibari, N. Lakhimpur, v.-vii. 1911 (*H. Stevens*).

Described from four specimens.

Like a very large specimen of *A. improvidus*, Fst., but without any pale markings; in the latter species the shoulders of the elytra are less prominent, the intervals are much narrower than the striæ, more rugulose, and very sparsely punctate.

*Alcides gmelinæ*, sp. n.

♂ ♀. Integument black, or the head and thorax black and the elytra and legs red-brown; the elytra with a narrow, ill-defined, pale band across the top of the declivity composed of narrow feather-scales, and a still less distinct stripe of similar sparser scales running from behind the scutellum towards the middle of the lateral margin.

*Head* with close reticulate punctation throughout in ♂, with any frontal fovea; ♀ with the forehead more sparsely punctate. *Rostrum* of ♂ shorter than the front femur, only slightly curved, parallel-sided from the base to the insertion of the antennæ (a little beyond the middle), thence gradually widening to the apex, closely and strongly punctate throughout, with a short median stria between the antennæ, and with a downwardly projecting tooth on the submentum; rostrum of ♀ also shorter than the front femur (scarcely longer than that of the ♂) and with the antennæ inserted a little beyond the middle, the apex less dilated than in the ♂, but the punctures nearly as dense and strong. *Prothorax* nearly as long as broad, parallel-sided for a short distance from the base, then roundly narrowed, and broadly constricted at the apex; the postocular lobes rather feeble; the dorsum closely set throughout with flattened scale-like granules, with fairly numerous feather-scales at the sides and a few down the middle line, the rest of the disk with sparse recumbent setæ. *Scutellum* not enclosed in front, quadrate. *Elytra* cylindrical, only slightly broader than the prothorax, with a very shallow transverse impression near the base; the foveolæ deep and oblong, becoming striate beyond the transverse pale band; the intervals rugulose, with sparse, minute, recumbent setæ. *Legs* with numerous narrow feather-scales; the anterior pairs of femora with a prominent bidentate tooth, that on the hind pair much reduced; the front tibiæ with a laminate angulation internally about the middle and with a very small apical tooth near the uncus, the posterior pairs simple.

*Length* 6.25–7.5 mm., breadth 2.25–3 mm.

UNITED PROVINCES: Dehra Dun, on grass, 1 ♀, 15. vii. 1912; Dehra Dun, boring in twigs of *Gmelina arborea*, 1 ♂, 1 ♀, vii. and ix. 1914 (*C. F. C. Beeson*). ASSAM; Cachar, bred from *Gmelina arborea*, 1 ♂, 10. viii. 1920. BURMA: Bilumyo R., Katha, 1 ♂, 13. v. 1919 (*Beeson*).

Very closely allied to *A. ludificator*, Fst. (*Ann. Mus. Civ. Genova*, xxxiv. 1894, p. 254), but the ♂ of that species may be at once distinguished by the absence of the tooth on the submentum; and in the ♀ the rostrum is longer than the front femur and very finely and sparsely punctate.

*Alcides bryanti*, sp. n. (Pl. VII. fig. 9.)

♂ ♀. Form elliptical; integument piceous or blackish, with pale stripes and bands formed of small subquadrate, overlapping, fringed, creamy-white scales; a narrow stripe

starting from the front margin of the pronotum on a line with the inner edge of the eye, running on to the elytra on the base of interval 5, almost immediately passing to 6 and continuing on it for one-third the length, then passing to 7 and there continued to the apex, though sometimes more or less broadly interrupted behind the middle; at about one-third from the base the longitudinal stripe emits a transverse band of the same width reaching almost to the suture and sloping slightly backwards, and at two-thirds the length a similar but much more oblique, and therefore longer, band; between these bands, but on the outer side of the stripe, two short, variable, and often irregular bands usually reaching stria 9; stria 1 with a row of pale dots on the declivity, each formed of about four scales (often abraded); the prothorax with a sharply-defined, narrow, lateral stripe extending from the postocular lobe to the basal constriction on a line with stria 10; the lower surface fairly densely clothed with small pale scales and buff powdering.

*Head* with close shallow punctation, the forehead with a transverse depression covered with dense scaling. *Rostrum* elongate, cylindrical, scarcely widened at the apex, feebly curved, coarsely punctate, and dorsally bicarinate as far as the antennæ, each of the punctures containing a scale, and the apical area with small sparse punctures; in the ♀ as long as but distinctly more slender than in the ♂, but the punctation only very slightly finer. *Antennæ* inserted a little beyond the middle in both sexes, the scape as long as the funicle, of which joint 1 is shorter than 2+3, 3 to 6 are transverse, and 7 is about as long as the club. *Prothorax* rather broader than long, rounded at the sides, widest behind the middle, constricted at the base and more strongly so in front; the dorsal apical margin gently rounded, the longitudinal outline feebly convex; the dorsum evenly set with low granules, the apical area shallowly punctate. *Scutellum* not enclosed, small, transverse, smooth, and bare. *Elytra* subcylindrical, a little broader at the shoulders than the base of the prothorax, obtusely acuminate behind, and with a strong transverse basal impression; the shallow striæ with large quadrate punctures as far as the posterior band, behind which the striæ are deeper and the punctures much smaller and shallower, the punctures without scales or granules; the intervals narrower than the striæ, subcostate, with small indistinct granules, which are more numerous at the base, and with microscopic setæ. *Legs* (fig. 1, *i*) rather long and slender, with coarse shallow punctures, each of which contains a scale; the femora with a sharp simple



tooth; the front tibiæ gently curved externally, strongly bisinuate internally and with an obtuse-angled tooth behind the middle, the median pair very feebly bisinuate within, the hind pair short and simple. *Sternum* with the front intercoxal space much narrower than the median one; the metasternum sparsely granulate.

*Length* 8-9½ mm., *breadth* 2.5-3.25 mm.

SARAWAK: Mt. Matang, i. 1914, Quop, iii. 1914 (type), Puak, v. 1914 (*G. E. Bryant*).

Described from six specimens.

Structurally this species belongs to the group represented by *A. chiliarchus*, Boh., and *A. ligatus*, Pasc., but may readily be recognised by its very distinctive pattern; the internal tooth on the front tibiæ is not so strongly developed as in the two species mentioned.

*Alcides vitalisi*, sp. n. (Pl. VII. fig. 11.)

♂ ♀. Body markedly flattened, as though adapted for subcortical habits; integument dark piceous, the head, prothorax, and the humeral angles of the elytra black; the pale scales on the prothorax forming only a faint median line, and fairly numerous on the pleuræ; the elytra with a broad transverse band of rather sparse, pale plumose scales behind the middle, extending from the lateral margin to stria 3 or 2, its anterior edge with a long projection on interval 5 and the hind margin angulate on interval 6; in addition, an indefinite preapical band of scales, which is broadly interrupted on the suture.

*Head* closely and coarsely punctate, the forehead flattened but without any median fovea. *Rostrum* unusually slender (especially in the ♀), straight, quite cylindrical, and almost porrect; in the ♀, longer, with the antennæ inserted far behind the middle, coarsely punctate in the basal third only, the distal portion being glabrous with extremely minute sparse punctures, the dorsal outline rising sharply (about 30°) near the junction with the head, the actual base being somewhat above the level of the forehead; in the ♂ shorter, with the antennæ at the middle, coarsely and confluent punctate to beyond the middle and with three irregular narrow carinæ, the apical portion with well-marked separated punctures, and the basal dorsal elevation much less marked. *Antennæ* with the scape only as long as the first 6 joints of the funicle; joint 1 of the funicle as long as the next 2½ joints, joints 2-6 all transverse, 7 as long as the club and longer than the three preceding joints. *Prothorax*

transverse, broadest at the base, rapidly narrowing in front, the sides strongly rounded and deeply constricted before the apex; the apical margin slightly produced dorsally, the postocular lobes small and fringed with long vibrissæ; the dorsal outline flat from the base to the constriction, then sloping slightly; the dorsum closely set throughout with low rounded tubercles. *Scutellum* entirely enclosed in front, small, elongate, bare. *Elytra* broad, suboblong, much broader than the prothorax, widest at the shoulders, which are acutely prominent, broadly rounded behind, the extreme apices deliscent, the basal lobes strongly produced, and a shallow semicircular depression round the scutellum; the punctures very coarse and deep, especially in the area between the shoulders and the transverse band; the intervals narrower than the punctures, rugulose, shiny, and with sparse, small, plumose scales and minute recumbent setæ; the epipleural carina running from the middle of the metasternum to the apex of the third apparent ventrite. *Legs* (fig. 1, *k*) piceous, with numerous oblong fringed scales; the femora with very coarse confluent punctures and with a stout blunt tooth, which is largely hidden by long curved scales; the tibiæ more shallowly punctate, the front pair with a sharp tooth on the inner edge about the middle and another at the apex, the other pairs with only the apical tooth; joint 2 of the front tarsi twice as long as broad, with the inner (or anterior) lobe longer and narrower than the other. *Sternum* with all the coxæ more widely separated than usual; the metasternum rugose and depressed in the middle in both sexes, and coarsely granulate at the sides.

*Length* 8.5–9.5 mm., *breadth* 4.25–5.5 mm.

INDO-CHINA: Hoabinh, Tongking, viii. 1918 (*R. Vitalis de Salvaza*, type). ASSAM.

Described from twenty-four specimens.

This striking species may be readily recognised by its unusually flattened form, pointed shoulders, and very narrow straight rostrum. The specimens from Assam constitute a rather smaller local race, characterised by its much less prominent shoulders, and may be designated *Alcides vitalisi subhumerosus*, subsp. n.

When dealing a few years ago with the species of *Alcides* allied to *A. delta*, Pasc. (Ann. & Mag. Nat. Hist. (9) ii. 1918, pp. 152–157), I unfortunately overlooked a paper by Faust in which two species of this group were described (Stettin. ent. Zeit. 1896, pp. 149, 150). Of these *A. perturbatus*, Fst., is obviously the same as *A. javanodelta*, Mshl., and the latter

name therefore falls as a synonym; the second species, *A. dejeani*, Fst., does not appear to agree with any of the species dealt with in my paper.

## EXPLANATION OF PLATE VII.

- Fig. 1. *Alcides crinalifer*, sp. n.  
 Fig. 2. — *habenatus*, sp. n.  
 Fig. 3. — *loratus*, sp. n.  
 Fig. 4. — *pyrifer*, sp. n.  
 Fig. 5. — *jugalis*, sp. n.  
 Fig. 6. — *stevensi*, sp. n.  
 Fig. 7. — *subsellatus*, sp. n.  
 Fig. 8. — *arcicollis*, sp. n.  
 Fig. 9. — *bryanti*, sp. n.  
 Fig. 10. — *trigonophorus*, sp. n.  
 Fig. 11. — *vitalisi*, sp. n.

L.—On the Names of certain Parrots of the Genus *Larius*,  
*Bodd.* = *Eclectus*, *Wagl.* By Lord ROTHSCHILD, F.R.S.

THE genus *Eclectus* has always excited much discussion, chiefly due to the extraordinary sexual dimorphism. Mr. Gregory M. Mathews has proved that the name *Larius*, *Bodd.*, has priority over *Wagler's Eclectus*, but ignores the "International Rule" which only allows names to be corrected by the author himself, and then ONLY in the same work in which he gave the name, and alters it to *Lorius*.

Count Salvadori, in the 'Catalogue of Birds,' enumerates six "species," as follows:—*pectoralis*, P. L. S. Müller; *roratus*, P. L. S. Müller; *cardinalis*, *Bodd.*; *riedeli*, Meyer; *cornelia*, Bp.; and *westermanni*, Bp.

Of these, *riedeli* and *cornelia* do not concern the present question at all, as the ♀ ♀ are entirely crimson-scarlet on upper and under side, and, although the ♀ of *westermanni* is very close to the two Moluccan forms, the ♂ has green flanks, and therefore this form also is outside our present problem.

Count Salvadori has used Philip Stadius Müller's names for the New Guinea and North Moluccan forms, and it is a great pity that his names have been adopted by ornithologists, as the whole work is a compilation, and in many cases the descriptions are extremely doubtful and in others (as in the present instance) the names are founded on figures of older authors who give impossible or extremely doubtful localities. As, however, P. L. S. Müller's names are accepted by the larger number of ornithologists, I do not feel justified in over-throwing the name *roratus*, which is the chief crux in this